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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,295	01/26/2001	Shingo Suzuki	108467	4830

25944 7590 05/17/2002

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EXAMINER

SAWHNEY, HARGOBIND S

ART UNIT	PAPER NUMBER
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2875

6

DATE MAILED: 05/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/769,295

Applicant(s)

SUZUKI ET AL.

Examiner

Hargobind S Sawhney

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. the preliminary amendment filed on June 11, 2001 has been entered.

Accordingly, Claim 5 has been amended; and new claims 6 and 7 have been added.

Claim Objections

2. Claims 1-7 are objected to because of the following informalities:

Regarding Claim 1, line 4, "said light source" should be changed as – said bar-like light source --;

Further, regarding Claim 1, line 7, "disposed at at least one end" needs to be revised as

-- disposed facing at at least one end – to make it consistent with lines 30 and 31 on page 5 of the specification. This application has been examined considering the limitation -- disposed facing at at least one end.

In addition, regarding Claim 1, line 9, "can guide light" needs to be revised as – guiding light --. The phrase "can" does not recite limitation in positive manner.

Claims 2-7 are necessarily objected because of their dependency on the objected base Claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe et al. (U.S. Patent No. 5,857,761).

Regarding claims 1-2, Abe et al. (U.S. Patent No. 5,857,761) discloses a spread illuminating apparatus (Figure 1) having:

- A bar-like light source including elements 1-3 (Figure 1, column 5, lines 29 and 30) positioned in the vicinity of an end surface 5 of a transparent substrate 4 (Figure 1, column 5, lines 31 and 54);
- The substrate 4 made of a light transmitting material (Figure 1, column 5, line 31);
- The bar-like light source including a light conductive member 3 made of a light transmitting material (Figure 1, column 5, lines 28 and 30), formed bar-like, and positioned closed to and along the end face 5 of the transparent substrate 4 (Figure 1);

- A spot-like light source 1 (Figure 1, column 5, line 27) facing the end of the light conductive member 3 (Figure 1) and a light guiding member 2 (Figure 1, column 5, line 28);
- the light guiding member 2 guiding the light (Figure 1, column 5, lines 28 and 29) and being positioned between the end 3a of the light conductive member 3 and the spot-like light source 1 (Figure 1);
- the light guiding member 2 being formed integrally with the light conductive member 3 (Figure 1);

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. (U.S. Patent No. 5,857,761).

Regarding claims 3 and 4, Abe et al. (U.S. Patent No. 5,857,761) further teaches the light guiding member 2 (Figure 1, column 5, line 32) being an optical fiber. However, Abe does not disclose a spread illuminating apparatus comprising a light guiding member separately formed from a light conductive member.

It would have been an obvious matter of design choice to modify the spread illumination apparatus comprising a light guiding member separately formed from a light conductive member instead of it being an integral with the light conductive member. Since the applicant has not disclosed that a separately formed light guiding member solves any problem or is for a particular reason. It appears that the claimed invention would perform equally well with a light guiding member separately formed from a light conductive member.

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. (U.S. Patent No. 5,857,761) in view of Narcisco, Jr. (U.S. Patent No. 5,237,638).

Regarding Claim 5, dependent on Claim 1; Claim 6, dependent on Claim 2; and Claim 7, dependent on Claim 3, Abe does not teach a spread illumination apparatus comprising a light guiding member having a means of increasing reflection.

On the other hand, Narcisco, Jr. (U.S. Patent No. 5,237,638) discloses a silicone optical wave-guide 10 (Figure 1) comprising a means – reflective coating – (Figure 1, column 1, lines 35-39, and column 4, lines 8-13) encasing the light guiding member 11 (Figure 1) for increasing reflection.

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the spread illumination apparatus of Abe by providing the light guiding member with reflective coating as taught by Narcisco, Jr. for the benefit and advantage of efficient illumination with improved light reflectance.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aiken (WO Publication No.90/04132) and Cassarly et al. (U.S. Patent No. 5,664,863) each discloses a spread illumination apparatus comprising some of the claimed features including a bar-like light source, a transparent substrate and a light guiding element.

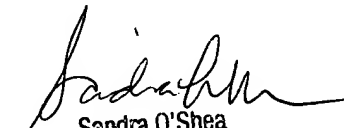
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 703-306-5909. The examiner can normally be reached on 6:15 - 2:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 703-305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-83037724 for regular communications and 703-308-8303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2956.

HSS

5/10/2002


Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800